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| APPLICATION NO.                                | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/593,116                                     | 09/18/2006  | Motohiro Ikawa       | 046262-0143         | 9927             |
| 22428 7590 02/22/2008<br>FOLEY AND LARDNER LLP |             | EXAMINER             |                     |                  |
| SUITE 500                                      |             |                      | MONIKANG, GEORGE C  |                  |
| 3000 K STREET NW<br>WASHINGTON, DC 20007       |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 2615                |                  |
|  |             |                      |                     |                  |
|  |             |                      | MAIL DATE           | DELIVERY MODE    |
|  |             |                      | 02/22/2008          | PAPER            |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| . <b>(</b>   |  |                 |  |  |  |  |
|--|--|-----------------|--|--|--|--|
|  | Application No.  | Applicant(s)    |  |  |  |  |
|  | 10/593,116   | IKAWA, MOTOHIRO |  |  |  |  |
| Office Action Summary  | Examiner   | Art Unit        |  |  |  |  |
|  | George C. Monikang   | 2615            |  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply   |  |                 |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |  |                 |  |  |  |  |
| Status   |  |                 |  |  |  |  |
| 1) Responsive to communication(s) filed on 18 Section 19   | eptember 2006.   | •               |  |  |  |  |
| ,  |  |                 |  |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is   |  |                 |  |  |  |  |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  |  |                 |  |  |  |  |
| Disposition of Claims  |  |                 |  |  |  |  |
| 4) ⊠ Claim(s) 1-21 is/are pending in the application. 4a) Of the above claim(s) 1-12 is/are withdrawr 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 13-21 is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/o  | n from consideration.  |                 |  |  |  |  |
| Application Papers   |  |                 |  |  |  |  |
| 9)☐ The specification is objected to by the Examiner.  |  |                 |  |  |  |  |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.   |  |                 |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |  |                 |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.   |  |                 |  |  |  |  |
| Priority under 35 U.S.C. § 119   |  |                 |  |  |  |  |
| <ul> <li>12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a)  All b)  Some * c) None of:</li> <li>1.  Certified copies of the priority documents have been received.</li> <li>2.  Certified copies of the priority documents have been received in Application No. 10/593,116.</li> <li>3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>   |  |                 |  |  |  |  |
| Attachment(s)  1) ☑ Notice of References Cited (PTO-892)  2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) ☑ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 9/18/2006.   | 4) Interview Summary Paper No(s)/Mail Di 5) Notice of Informal F 6) Other: | ate             |  |  |  |  |

## **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35
 U.S.C. 102 that form the basis for the rejections under this section made in this
 Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 13-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Fujii et al, US Patent 7,085,477 B2.

Re Claim 13, Fujii et al discloses a sound-volume controlling method of controlling sound volume per step (*col. 6, line 53 through col. 7, line 4*), the sound-volume controlling method comprising: specifying a step zone in which a volume change amount per step is to be changed (*col. 6, line 53 through col. 7, line 4*); changing a first volume change amount per step in specified step zone to obtain a second volume change amount per step without a change in total number of steps (*col. 6, line 53 through col. 7, line 4*); and controlling sound volume based on the second volume change amount, wherein the changing includes changing the first volume change amount in the specified step zone to be less than a default value (*col. 10, lines 52-67*), and changing a volume change amount per step in at least one step zone other than the specified step zone to be more than the default value to maintain the total number of steps (*col. 10, lines fol. 10, lines fo* 

<u>lines 52-67</u>), and the specifying includes specifying an arbitrary width of the step zone in a range of the total number of steps (<u>col. 6</u>, <u>line 53 through col. 7</u>, <u>line 4</u>).

Re Claim 14, Fujii et al discloses the sound-volume controlling method according to claim 13, wherein the changing includes changing a volume change amount per step to be uniform in all step zones except for the specified step zone (col. 6, line 53 through col. 7, line 4).

Re Claim 15, Fujii et al discloses the sound-volume controlling method according to claim 13, wherein the changing includes changing a volume change amount per step to be different in all step zones except for the specified step zone (col. 6, line 53 through col. 7, line 4).

Re Claim 16, Fujii et al discloses the sound-volume controlling method according to claim 13, wherein the specifying includes specifying an entire step zone (*col. 6, line 53 through col. 7, line 4*), and the changing includes changing a volume change amount per step in the entire step zone (*col. 6, line 53 through col. 7, line 4*).

Claim 17 has been analyzed and rejected according to claim 13.

Re Claim 18, Fujii et al discloses the sound-volume controller according to claim 17, further comprising a storage unit (<u>fig. 1: 51</u>) that stores therein a pattern of a volume change amount per step as a volume control curve (<u>figs. 2 & 4</u>), wherein the changing unit changes the volume change amount per step based on the volume control curve (<u>figs. 2 & 4; col. 6, lines 43-53</u>).

Claims 19 & 21 have been analyzed and rejected according to claim 1.

Claim 20 has been analyzed and rejected according to claim 18.

Art Unit: 2615

## **Contact**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George C. Monikang whose telephone number is 571-270-1190. The examiner can normally be reached on M-F. alt Fri. Off 7:30am-5:00pm (est).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chin Vivian can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

George Monikang

2/19/2008

VIVIAN CHIN

SUPERVISORY PATENT EXAMINER

2/19/08